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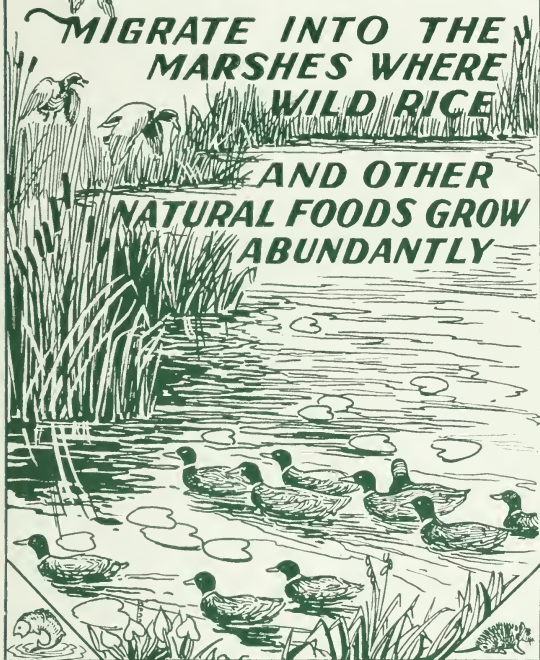
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Agriculture

# THOUSANDS OF WILD DUCKS AND GEESE

MIGRATE INTO THE  
MARSHES WHERE  
WILD RICE

AND OTHER  
NATURAL FOODS GROW  
ABUNDANTLY



ALSO

*Natural Foods for Fish, Muskrats  
and Upland Game Birds*

**WISCONSIN  
AQUATIC NURSERIES**

P. O. Box 331

**Oshkosh, Wisconsin, U.S.A.**



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**Wisconsin Aquatic Nurseries**

*P. O. Box 331*

*Oshkosh, Wisconsin, U. S. A.*



## These Two Men Are the Same Age

One has driving power, energy, the will to succeed.

The other is listless, tired all the time, it is an effort for him to plod through each day's work.

### WHY?

The one with the bloom of youth spends some time in the out-of-doors, in the free open spaces, rests his weary mind from the worries and cares of life.

The other, wrinkled, gray, careworn, far older than his years, is depriving himself of the health giving, invigorating recreation. Those needed hours of hunting and fishing that add years to one's life.



# **HEARD of the BUFFALO?**

Years ago great numbers used to roam the western prairie; yes, thousands of them. They were a wild ox (American bison) commonly known as buffalo.

Today they are gone, civilization has crowded them out. A few remain in the various zoos.

## **Remember the Pigeon?**

Not many years ago the Passenger Pigeon was here in countless numbers. Wonderfully prolific, having the forest of the north as its breeding ground, traveling hundreds of miles in search of food, it was here today and elsewhere tomorrow.

Today they are gone; the last Passenger Pigeon died in 1914 in the Cincinnati zoo.

## **Now the Heath Hen**

Their numbers have also dwindled away. In 1916 there were estimated about 2000 Heath Hen, in 1928 there remained but three.



## **WILL THE WILD DUCK GO?**



What is happening to our supply of Migratory Waterfowl? Officials report the 1930 hatch at about one-half that of 1929. Drainage, drought and other causes have reduced the shallow water area, taking away their feeding and breeding grounds. In 1930 on the few remaining attractive places which abound in natural foods larger numbers of Wild Ducks congregated than for many years.

Do your bit toward conservation of the Wild Duck, help to prolong this great outdoor sport. Plant that pond, river or bay with natural aquatic food plants, increase the range of the waterfowl and you will be helping to increase their numbers and at the same time insure some real sport for yourself and sportsmen associates.

# **WILD DUCKS MUST EAT**

Did the wild ducks and geese darken the sky over your local waters or at the preserve last fall? If not, there is some reason, undoubtedly the very reason is that there is not enough natural food growing there to attract them.

Wild ducks cannot live upon waters without food and therefore migrate on to the places where they find plenty of the kinds of food they like. In waters where their natural food does not grow now, it can very easily be planted and the waters made attractive to the wild waterfowl.

There are important food plants for these wild waterfowl which will grow under almost every water condition that exists. A few of the most important and most hardy of these are described in this booklet.

There are undoubtedly several food plants adapted to your water conditions and it will be advantageous to have a variety growing in your waters. Different kinds of waterfowl are fond of different kinds of food. Different plants produce food in various forms at different times throughout the season. Therefore, a variety of foods attract a larger number of ducks and holds them for a longer interval. As a result you will have more ducks and receive better hunting throughout the entire season.

## **SUPPOSE—**

Just suppose you had a pasture with sufficient food growing to keep one hundred cattle throughout the season.

Suppose instead of one hundred you turned one thousand head in there what would happen?

They would either starve or break out and wander into other fields where food is more plentiful.

## **It's the Same with Wild Ducks**

When the ducks stop on your waters and find little or no food, they go on their way in search of better feeding grounds—but if they find plenty of natural foods there you can't drive them away.

To have the best of duck hunting all that is necessary is to start a growth of their favorite foods.

# WILD RICE

## TO LURE THE MARSH DUCKS



Wild Rice Head

Mallards, Pintails, Blackducks, Teal, Widgeon and Canada Geese fly hundreds and hundreds of miles to the Wild Rice Marshes. During Fall they find the ripened grains in great abundance, also shelter and hiding places among the tall growth. If there are several Wild Rice marshes in the vicinity, great numbers of these waterfowl will be seen passing from one marsh to the other. In the north only the freezing water will drive them out. Farther south they will stay on these good feeding grounds throughout the entire winter. Wild Rice is also very important as a Muskrat food.

A field of Wild Rice once established makes a permanent feeding ground, for Wild Rice reseeds itself from year to year.

### WHERE TO PLANT

The best places for planting wild rice are in fresh water streams, sloughs, marshy lakes or ponds, having an outlet, soft mud bottom and waters from 6 inches to 3½ feet in depth. In sunny sheltered bays or coves on larger lakes, streams or rivers where it is protected from waves or strong currents are excellent places to plant. If planted upstream, parts of the plants and some of the seed produced, will be carried downstream each year, and become established in suitable places all along the waterway.

Near the seacoast wild rice will thrive in streams where the waters are not salty to taste and where the tide is not over four feet. Tame rice fields that depend on tides for their water supply are usually very good places for growing wild rice, or in old abandoned rice fields where there is a change of water.

Wild Rice is easy to grow. It does very well in Canada and the northern states above the Mason-Dixon line. It has proven a success in a



few of the southern waters where conditions were nearly exact. A free change of fresh water is the main requirement.

### PLACES NOT SUITABLE

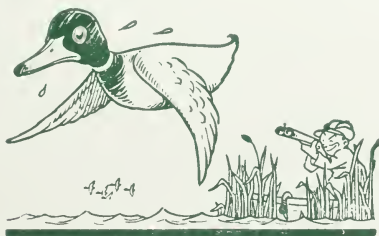
Years of experience has taught us that Wild Rice does not do well in landlocked lakes or ponds (those having no outlet), waters salty to taste, strongly alkaline or on white marl bottom soil. Such places as along the Mississippi river and its tributaries where the water rises and stays ten feet or more above the low water mark for several weeks during spring are also unsatisfactory. Wild Rice will be drowned out by such a condition. If conditions such as described exist in your waters then we suggest the planting of other duck foods which are suited to such places, find them described on the following pages.

### WHEN TO PLANT

In Southern waters Wild Rice Seed may be planted from January to June. In the North as soon as the waters are free from ice during spring. We suggest planting as early as possible to give it full advantage of the entire growing season so that the expected results may be obtained by fall, fully matured plants, lots of feed and plenty of ducks. Good seed is important; we supply only the best, hardy Giant Wild Rice Seed, guaranteed to grow (see guarantee on page 27).

### HOW TO PLANT

Wild Rice Seed is very easily planted, all that is necessary is to broadcast the seed on the waters ranging in depth from 6 inches to 3½ feet. Plant where there is a fairly rich bottom soil, scattering about one handful of seed to each two or three square yards. The seed will immediately sink to bottom and within a short time will bury itself in the bottom soil. We urge you to plant early as possible for in late spring the seed is inclined to sprout which makes it necessary to



mix the seed with mud in order to sink it to bottom. Sprouted seed will float on the waters and is more bothersome to plant.

Our supply of Wild Rice Seed is very limited, therefore, we suggest that you place your order early and be sure of your supply. We will store your seed until you wish shipment. Complete planting instructions are sent with each order. Fifty pounds will plant an acre. Thirty pounds to one bushel.

Price \$0.45 per pound, quantities of 10 pounds or more. \$0.50 per pound, quantities less than 10 pounds.

F. O. B. Oshkosh—add 10c per pound for postage if desire shipment postpaid.



March 28, 1929.

Wisconsin Aquatic Nurseries  
Oshkosh, Wis.



Gentlemen: Enclosed please find my check for \$66.15 for which please send me 100 lbs. Wild Rice Seed. I would like to have it ar-

rive here about the 19th of April which is the time that the ice usually goes out of the local lakes. Please ship by American Express.

The lot that I had from you last year did very well in the situations where the bottom was congenial. I think that due to cooler weather and water that growth here is not inclined to be as great as in many other localities. However the crop matured seed and was very satisfactory. The greatest difficulty was with the birds eating the tender green shoots as they came through the water. I expect that with the larger quantity ordered this year that more of the plants will escape being eaten while green.

Very truly yours,

R. B. PIKE,

c/o R. B. Pike & Co., Lubec, Maine.



A Wild Rice Bed 45 Days After Planting

# WILD CELERY

## BRINGS THE DIVING DUCKS



Wild Celery Plant

Canvasbacks, Redheads, Bluebills, etc., darken the sky over the Wild Celery beds. A few years ago it was no trick at all to go out and get the limit of those big old Canvasbacks and Redheads, neither is it today where the Wild Celery beds abound. But, many of the vast Wild Celery

beds of former years have disappeared; drainage, pollution and other causes have destroyed many and many an acre of them. We must utilize every lake, pond and stream to prolong this sport.

You will find no better way to increase your enjoyment during your hours of recreation than shooting these leery old divers. Thousands of them can be attracted to your local waters by establishing a growth of Wild Celery.

All parts of the plant are eaten by the Wild Ducks, but the tender winterbuds and rootstocks are relished most. Once the Wild Celery is established in your waters it will grow there permanently. There is no danger of the ducks destroying the growth for there are many tubers which break off remaining in the mud and many plants never molested which will produce the following year.

## IMPORTANT FOR FISH

Wild Celery being a submerged water plant is also important as a food and cover plant for fish. The plants support countless numbers of minute insect and animal life which fish depend upon for food. Fish also eat portions of the plants themselves. A bed of Wild Celery will keep your waters pure and clear and well oxygenated, which is important for fish life. The plants provide shelter and hiding places for young fish,

where they can escape from their enemies, assuring many more of them reaching maturity. Wild Celery is an excellent winter food for Muskrats.

### WHAT AND WHEN TO PLANT

The Wild Celery propagates in three ways, by seed, runners and winterbuds, a sort of tuber. It is by planting these winterbuds (tubers) during the months of April, May and June that one can establish a quick and very good growth of Wild Celery in their water. Results may be noticed by the following fall.

### WHERE TO PLANT

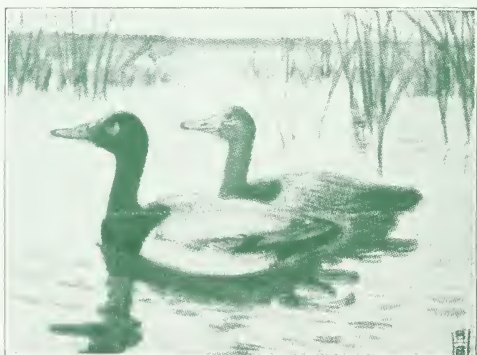
Wild Celery grows best in waters from 2 to 10 feet in depth preferably on a mud bottom, although it will grow on sandy loam or clay. It requires fairly fresh waters, that is waters which are not real salty or strongly alkaline. This plant does not grow well in landlocked waters.

### HOW TO PLANT

Get a quantity of clay and moisten until it becomes about the consistency of putty. Then take a handful of clay and mould it into a ball about the size of a tennis ball. Break this clay ball in two and place 2 of the Wild Celery tubers between the halves and press firmly together. After a quantity has been made take them to the desired planting place and drop one by one into the waters about 3 to 6 feet apart. We furnish more complete planting instructions with each order.

One Thousand Tubers plant one Acre.

Price \$20 per 1,000 ; \$2.50 per 100 Tubers.



Canvas-Back

# **SAGO PONDWEED**

**BEST ALL ROUND DUCK FOOD**



**Sago Pondweed**

Early in the season the Sago Pondweed will attract Mallards and Teal, later the Canvasbacks and other divers. It's the most important of water plants for both wild ducks and fish. All species of wild ducks feed upon its roots, tubers and seeds which are produced in abundance. In fact all parts of the plant are eaten by the wild ducks, but they cannot destroy the growth for it has a very strong root system which makes a net work through the bottom soils. Many roots and tubers remain unmolested to produce a growth the following year. One planting will make a permanent growth. Sago Pondweed produces more food for the Wild Ducks than any other aquatic plant. It is also an important food plant for the Muskrats, especially during winter.

## **EXCELLENT FOR FISH**

Like the Wild Celery the Sago Pondweed also provides food, cover and protection for the fish. It purifies and clarifies the water, takes up the poisonous gases and puts forth oxygen into the waters. Various kinds of insect life deposit their larva on these plants which is food for the small

fish. The Sago Pondweed plants shade and cool the under waters and will not only improve the fishing but also the quality of the fish.

## WHAT AND WHEN TO PLANT

The tubers of Sago Pondweed should be planted during April, May and early June. They will produce some food for the Wild Ducks the following Fall. These plants have a very strong root system and are indestructible by Carp.

## WHERE TO PLANT

These plants are very hardy and will grow in almost any waters except salt waters. On practically every kind of bottom soil except gravel. They are submerged plants and do best in waters from 2 to 6 feet in depth, although Sago Pondweed will grow in water from 1 to 10 feet in depth. When possible plant where there is some mud.

## HOW TO PLANT

The tubers are planted in the same manner as Wild Celery tubers (see how to plant on page 8). Complete planting instructions are furnished.

One Thousand Tubers will plant an Acre.  
Price \$26 per 1,000 tubers; \$3.50 per 100.

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May 6, 1926.

Wisconsin Aquatic Nurseries  
Oshkosh, Wis.

Dear Sirs: Enclosed please find my check for \$21.00 for which you will please send me at once 1000 Wapato Duck Potatoes. You shipped me some last year and they did very well.

On February 10 you sent me 500 Sago Pondweed Tubers which are coming fine.

Trusting that you will express the above at once, I am

Sincerely yours,

CARL G. LIEBE,

545 E. 14th St., N., Portland, Oregon.





# WAMPEE

## DUCK CORN



Wampee

A good Wild Duck Coaxer for Southern waters. Marsh ducks are particularly fond of the Wampee Seeds which shell off the stock in late fall like kernels of corn shelled from the cob. It will help hold the Mallards and other shallow water feeders after many other foods are gone.

## WHEN AND WHERE TO PLANT

Wampee Plants may be transplanted during late May and the month of June. They grow in wet marshy boggy places or on fairly rich mud bottom in waters from 1 inch to 1 foot in depth. Plant them in the shallow waters of any lake, pond or stream. Plant seeds during early spring.

## HOW TO PLANT

Just step into your rubber boots and take a spade or spading fork and a quantity of plants to the place you intend planting. With the spade or fork lift a bit of soil, then place the roots of the plant into the opening after which replace the soil and step it in firmly with your boot.

Wampee Seed may be planted by mixing same with a good sticky clay and scattering small parts of the mixture here and there in the shallow waters. If it is your desire to plant this seed in a wet marshy place, simply make a hole with a stick, drop in several seeds and step the soil together, closing the hole. We will furnish complete planting instructions with order. Five hundred plants or ten pounds seed will plant an acre.

Price \$10 per 100 plants, \$75 per 1,000,  
\$0.75 per pound seed.



# Wapato Duck Potato

## RAPID GROWING DUCK COAXER



Duck Potato

The Wapato Duck Potato is a very good all around Wild Duck food. Canada Geese and Swan are also very fond of this plant. The species of Wild Ducks which will feed upon Wapato depends largely upon the water conditions under which it grows. If the waters remain nearly the same level the year around, Mallards and other shallow water ducks will feed upon the tender shoots, tubers and seeds which it pro-

duces. In places where there is an overflow or the water deepens during fall and winter, Canvasbacks and other divers will feed upon Wapato.

As a Muskrat food the Wapato is considered among those of the most importance and is often called Rat Potato.

### WHAT AND WHEN TO PLANT

Wapato propagates largely by tubers which should be planted during April, May and June. Tubers planted in spring will produce fully matured plants the following fall.

### WHERE TO PLANT

This plant is very hardy and will grow well in most any inland waters excepting those which are very strong of alkali or salts. It does the best in a fairly rich soil on damp lowlands, mud flats or in water from 1 inch to 1 foot in depth.

### HOW TO PLANT

The tubers of the Wapato Duck Potato are very easily planted, all that is necessary is to step into your boots or waders and take a quantity of tubers to the place you wish to plant. Then push each tuber about one or two inches deep into the bottom soil, planting about three feet apart. More complete planting instructions sent with order. One thousand tubers plant one acre.

Price \$20 per 1,000 tubers; \$2.50 per 100.





Black Duck

## MUSKRATS

The number of muskrats which one can support on any given area of marsh will be in proportion to the amount of food which grows there. You could not keep a thousand muskrats on a marsh with only food enough for ten. If you did try to they would soon migrate to other marshes. It is also true of the muskrat that if the food supply is not plentiful they will not breed as rapidly for they realize that by increasing their number it reduces their own supply of food.

The best food plants for the muskrat in order of their importance are the Wapato Duck Potato, Wild Rice, Cattails, Spatterdock, Wild Celery, Wild Millet, Bullrush, Sweet Flag, Burreed, American Lotus and Sago Pondweed.

Statistics compiled by Frank G. Ashbrock of the U. S. Biological Survey, show that the muskrat is the most important of all fur bearers. More than fifty per cent of all fur used today is muskrat. For the past few years the demand for muskrat pelts has exceeded the supply by from fifteen to twenty million pelts.

To successfully raise muskrats one must have a spring fed marshy swamp with an outlet which can be dammed, so that a uniform water level may be maintained. The depth of the water and musk, or floating bog, must be sufficient so that it will not freeze to the bottom in the most severe winter, the result of which would be cutting off the food supply and the starvation of the animals, unless artificially fed. The swamp lands must abound in the natural foods.



If a muskrat farm is ideally located, properly fenced and well planted with natural foods, it is bound to be a money maker. It is a never failing crop, unaffected by hot, cold, wet or dry weather.

# Wild Duck Millet



Wild Duck Millet  
Seed Head

## ATTRACTS THE SHALLOW WATER DUCKS

Also known as Goose Grass. Ranks almost as high as Wild Rice as a good Duck Coaxer in localities where Wild Rice cannot be grown. Wild Duck Millet grows to be 4 to 6 feet high and makes very good blinds as well as producing a large seed head with an abundance of food for the Wild Ducks. It also provides food and cover for Muskrats.

# Smartweed

A popular food with the Mallards. On the low-lands where Smartweed grows, from Canada to the Gulf, Mallards will surely stop during their flight. They are particularly fond of feeding upon Smartweed in places which overflow in fall, where they may dibble the seeds from the mud in shallow waters.

## IMPORTANT FOR QUAIL

Both the Wild Millet and Smartweed are considered as important food plants for upland game birds. They produce an abundance of seeds which Quail and Grouse are very fond of. In studying the habits of the game birds we find that twice daily they go to the nearby ponds or streams for water and like to linger there and feed.

## WHAT AND WHEN TO PLANT

Seeds of both Wild Duck Millet and Smartweed may be planted during months of May and June.

## WHERE TO PLANT

The Wild Duck Millet and Smartweed grow under similar conditions on damp low-lands and mud flats. They have proven very good along the Illinois and Mississippi rivers, also on old

Rice fields and in such places as can be flooded during the duck season. They do best on a fairly rich soil.

### HOW TO PLANT

It is well to break the soil where possible. One may use a drag, disc or grub hoe. Then sow the seed broadcast, after which drag or rake the planted area so as to cover the seed.

Forty pounds will plant one acre.

Wild Duck Millet or Smartweed Seed.

Price \$15 per 100 lbs.; \$0.16 per pound.



Pintail or Sprig

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THE FIRST NATIONAL BANK,  
Huntsville, Texas, Feb. 15, 1928.

Wisconsin Aquatic Nurseries  
Oshkosh, Wis.

Two years ago we bought some Wild Rice Seed from you for our lake. It grew fine and we had a very nice stand. However, a few months later, a water spout broke our poorly constructed dam and we lost it. We now have it in good shape for standing severe strain and have concluded to plant some more Rice.

Kindly send me 25 pounds Wild Rice Seed for planting in our lake.

Signed:

Yours truly,

G. A. WYNEE, Vice Pres.

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### AN IDEAL DUCK PRESERVE

Should have shallow water ponds, 10 inches to 3 feet in depth, natural foods growing in abundance. Set aside an equal area of resting grounds to that of shooting grounds. Bait artificially only on the shooting grounds. Let the ducks go out to the resting ponds in early morning and do your shooting as they return to feed, during the morning only.

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Wisconsin Aquatic Nurseries  
Oshkosh, Wis.

June 23, 1930.

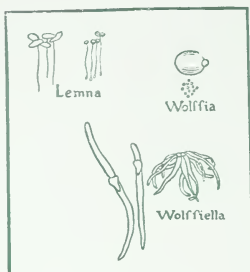
Gentlemen: Just received last order today, ordered by Mr. Walker. It arrived in good shape. The stuff I got before is coming along very nicely.

Signed: Yours very truly,

PERCY D. GASKILL, D.D.S.,  
Lancaster Inn, Lancaster, Calif.

# DUCKSMEAT

## OR DUCKWEEDS



Ducksmeat

All kinds of Wild Ducks feed upon the Duckweeds. The shallow water feeders make up a larger percentage of their food of this plant than the divers, because it grows largely in shallow waters. It is also important for fish.

## SURFACE FLOATING DUCKWEEDS

This is a very small plant (less than  $\frac{1}{4}$  inch in size) which floats in great clusters upon the surface of the waters.

## SUBMERGED FLOATING DUCKWEEDS

Another very small plant (less than  $\frac{1}{4}$  inch in size) which floats in great masses, submerged near the bottom.



Coontail

## COONTAIL PLANTS

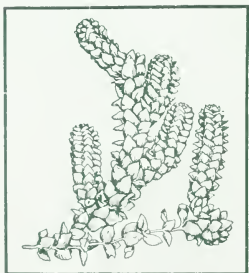
Seeds of the Coontail Plant are eaten by many species of Wild Ducks, occasionally they will feed upon the foliage. This plant provides both food and cover for fish.

## ELODEA

The Elodea is of value as a food plant for marsh ducks. It has a greater value as a food and cover plant for fish. It is also a very good water purifier.

## WHAT, WHEN AND WHERE TO PLANT

All of the above plants grow under very similar conditions and are transplanted in the same manner during the months of June, July and August. These plants should be transplanted into fresh waters from 1 to 6 feet in depth on any kind of bottom in ponds or quiet sheltered bays and coves. The above plants are indestructible by Carp.



Elodea

## HOW TO PLANT

Just drop a handful of plants into the waters about every two feet.

Five bushels of plants to the acre.

Price \$4.50 per bushel plants; \$4 per bushel in 10 bushel lots.



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Wisconsin Aquatic Nurseries  
Oshkosh, Wis.

May 13, 1929.

Gentlemen: You may be interested that the planting we made of your materials last year was very successful.

Thanking you for your very courteous services, I am  
Yours very truly,

ROBERT OGDEN, JR., Secretary,  
Casper Rod & Gun Club, Casper, Wyo.

---

Wisconsin Aquatic Nurseries  
Oshkosh, Wis.

Oct. 7, 1927.

Dear Sirs: The Wild Rice Seed I got from your company last fall is doing fine. Will send you another order a little later, as soon as I have made the necessary arrangements.

Yours truly,

W. C. WALLACE, Errol, N. H.

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Wisconsin Aquatic Nurseries  
Oshkosh, Wis.

December 21, 1928.

Atten. Mr. Coon:

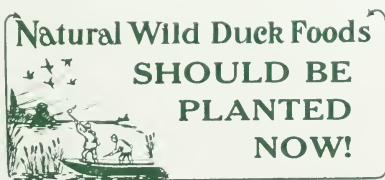
Gentlemen: The Sago Pondweed seed reached me in good shape, they were damp and looked good. They were planted at once. Would have been glad to meet you while in Montgomery. We would have been delighted to have had you inspect our lake. The Wild Rice we planted grew fine, our Spatterdock and Lotus Waterlily are well set, made a fine crop this year.

To show what Natural Food will do, we have ten Wild Ducks now to every one last year. If we can just get some other plants well set, we will have the greatest duck lake in the country.

We have so many ducks now I believe they would destroy the tubers if we were to plant more. I know they would get most of them. How about spring planting? Will give you an order for some other materials a little later this spring.

Signed: Yours very truly,

J. F. YARBROUGH, Montgomery, Ala.



# WATER MILFOIL



Water Milfoil

An excellent plant for fish ponds. Water Milfoil supports numerous kinds of animal life which is food for the fish. It furnishes cover, also shades the under water and purifies it, thereby, keeping it cool and fresh during hot summer. It is also of value as a waterfowl food.

# WIDGEON GRASS

FOR BRACKISH WATERS



Widgeon

Redheads, Bluebills and Canvasbacks feed upon the roots, seeds and leaves of Widgeon Grass. It is considered the best Wild Duck attraction for brackish waters. Mallards and other marsh ducks feed upon Widgeon Grass during low tide where it grows in bays and streams

which are affected by tides.

## WHEN AND WHERE TO PLANT

Water Milfoil plants are transplanted during May, June and July. It produces most satisfactorily in fresh waters from 3 to 9 feet in depth on a mud bottom in slow running streams or sheltered bays and coves.

Widgeon Grass plants are also transplanted during May and June and is a brackish water plant. It grows in salt water but never in that of full ocean strength. It thrives in rivers affected by ocean tides. This plant grows in waters from 1 to 10 feet in depth on a mud bottom.

## HOW TO PLANT

Both the Water Milfoil and Widgeon Grass plants are planted by simply pushing the roots of

the plant down into the mud with an oar or a paddle in two to six feet of water.

Three bushels of plants to the acre.

Price Water Milfoil Plants \$4.50 per bushel;  
\$4.00 per bushel in 10 bushel lots.

Widgeon Grass Plants  
\$9.00 per bushel; \$7.50 per bushel in  
10 bushel lots.



Redhead

## EEL GRASS

FOR SALT WATER



Eel Grass

The Eel Grass is the only important Wild Duck food plant which we supply that will grow in waters which are salty. All kinds of Wild Ducks will feed upon the seeds and foliage.

### WHEN, WHERE AND HOW TO PLANT

Plants of the Eel Grass are transplanted during June in quiet, shallow salt waters covered at low tide. In transplanting these simply set them out in shallow waters during low tide by making a hole in the soil and placing the roots in it; then replace the soil pressing it firmly about the plant.

Price \$15 per bushel; \$10 per bushel in  
5 bushel lots.

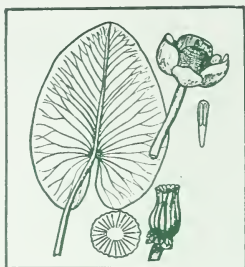


# WATERLILIES

## SPATTERDOCK

Also known as Yellow Waterlily, make a fine Wild Duck attraction when planted in addition to other natural foods. Marsh Ducks feed upon the seeds in early fall.

Spatterdock is considered an excellent winter food for the Muskrat as it grows in waters at a depth beyond the freezing point.



Spatterdock

## WHITE WATERLILY

An excellent food and cover plant for fish. White Waterlilies are very ornamental and will add to the beauty of your waters.

## AMERICAN LOTUS

Has some value as a food and cover plant for fish and is also of value as a wild Waterfowl food. American Lotus is very ornamental having large cream color flowers. Muskrats are fond of the sweet roots of this plant.

## WHEN, WHERE AND HOW TO PLANT

Tubers or rootstocks of Spatterdock and White Waterlilies are planted during May and June. Seed of the American Lotus may be planted at any time. All waterlilies do best on a mud bottom in waters from 1 to 4 feet in depth.

Tubers and rootstocks are very easily planted. Cut a fairly straight stick about 5 feet in length which is between 1 and 2 inches in thickness. Whittle off one side at end to make a flat surface, then drive two nails into this flat surface on a slant to make a sort of crotch.

Place a tuber into this crotch and push it into the mud about 3 or 4 inches. Plant these about 3 feet apart. These tubers are usually planted from a boat.



Lotus

Seven hundred fifty tubers will plant one acre.



American Lotus seed is simply broadcast using 10 lbs. to plant an acre.

### PRICES

White Waterlily Tubers \$0.15 each ;  
\$7.50 per 100.

Spatterdock Roots \$0.15 each ; \$10 per 100.  
American Lotus Waterlily Seed \$0.75 per pound.

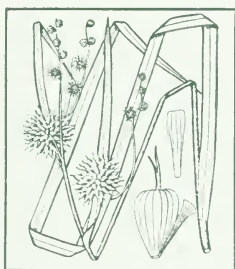


## COVER PLANTS

### BURREED

Is a valuable plant to have growing in your marsh. Seeds which resemble kernels of corn, shell from the large prickly burr during fall and are eagerly eaten by Marsh Ducks.

Burreed grows from 3 to 5 feet in height and during early summer makes ideal nesting places for the Wild Ducks, also provides blinds for the hunter during fall. This is an important Muskrat food.



Burreed

### CATTAILS

These plants grow to be 5 to 7 feet high and make good blinds. Cattail plants rank very high as a food, also cover plant for the Muskrats.

### REEDGRASS



Reedgrass

Makes the very best blinds for hunters. It grows from 5 to 8 feet with numerous long narrow leaves, during late fall in the North, Wild Ducks will seek shelter from the cold winds among the Reedgrass. It is also of importance for the Muskrat.

### BULRUSH

The Bulrush will grow in waters having very sandy bottoms where other vegetation cannot be

grown. It provides excellent blinds for the hunter and good shelter for the Ducks. Also a Muskrat food.

### WHEN AND WHERE TO PLANT

The Burreed, Cattail and Reedgrass grow best on a fairly rich soil either on wet lowlands or in waters from 1 to 18 inches in depth. Bulrush will grow on any kind of bottom except stone, in waters from 1 inch to 3 feet in depth. The roots of these plants should be transplanted during May and June.

### HOW TO PLANT



Slip on your boots, take a spade or digging shovel and a quantity of roots to the place you are going to plant. In the shallow waters about three feet apart, take up a shovel full of soil and place 1 root in each hole, then replace the soil and press it firmly into place with your boot. One thousand Roots will plant one acre.

### PRICE

\$7 per 100 Roots; \$50 per 1,000 Roots.  
Burreed Seed \$0.70 per pound.

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Wisconsin Aquatic Nurseries  
Oshkosh, Wis.

Oct. 8, 1929.

Gentlemen: Enclosed please find check for Wild Duck Food. Just writing a few lines to let you know about the results obtained from your Wild Rice and Wild Celery I purchased from you last fall. Up to the time it was seeded there was never a duck on the pond to my knowledge. About a week ago there were about thirty ducks on it of which we killed five and I believe that the Wild Duck Food sure was what attracted them. I am going to seed another pond this fall.

Signed:

Sincerely yours,

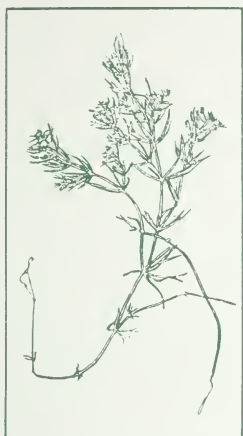
EMIL GILLHAM,

R. 2, Box 93, Fair Grove, Mo.



Shoveler or Spoonbill

# MUSKGRASS



Muskgrass

A few bushels of Muskgrass planted during late summer or fall will produce an excellent feeding place for the Wild Ducks the following season. They feed upon the foliage as well as the many small tubers which are produced. Both Marsh Ducks and Diving Ducks feed upon Muskgrass. One will also increase the sport with rod and reel, for Muskgrass is a valuable food and cover plant for fish.

Broadcast bits of the plants containing (oogonia) seed spores upon the waters anytime from July to December. Muskgrass grows in fresh or alkaline waters from 2 to 12 feet in depth on almost any kind of bottom. One requirement is that the waters contain some lime which will be indicated by shells or shell bearing creatures such as snails or clams in the waters. Four bushels will plant an acre.

Muskgrass Seed Spores \$4 per bushel.

# Chufa, Nutgrass



Chufa

A very good all round duck food for places which are very dry in summer and flood during the duck season. Chufa does particularly well in the South and may be planted anytime from March to July. One bushel of the nut-like tubers will plant an acre. In planting break the soil, then broadcast the tubers and rake or drag planted area to cover tubers.

Chufa Tubers  
\$10 per bushel.

# WATER CRESS

The Water Cress is used largely by breeders of Wild Ducks, who consider it very valuable as a food plant for their Duck Farms. It grows very rapidly.

Water Cress may be started either by planting seed or transplanting plants from April to July. It grows in cool waters, usually where there is a slight current, like in springs, brooks, small streams or shallow ponds. In transplanting plants simply set them out by hand in shallow waters 1 foot or less in depth. Seed is best planted by mixing it with mud and dropping bits of the mixture here and there in the waters. One thousand plants or 3 pounds of seed for one acre.



Watercress

Water Cress Plants \$5 per 100; Water Cress Seed \$7.50 per pound.

## For Wild Ducks, Quail, Grouse and Pheasants

### DUCK WHEAT



Or Wild Buckwheat is a very rapid growing plant. It produces an abundance of seed which Wild Ducks and Geese are fond of. Most favorable results are obtained when seed is planted in June or July on places which go dry or can be drained during summer and flooded during the duck season.

### MILO MAIZE

This plant is used in the same manner as Duck Wheat and is planted about the same time under similar conditions. Both Quail and Grouse are very fond of the Wild Buckwheat and Milo Maize; plant a little space here and there in the waste places.

### HOW TO PLANT

Break the soil with a plow, disc or drag, then broadcast the seed using about 50 pounds to the acre and drag or rake the planted area to cover seed. Price \$15 per 100 pounds.

**Sweet Flag Seed. . . . . \$1.00 per lb.**

The Sweet Flag is an important food and cover plant for Muskrats. Also important cover for waterfowl and provides excellent nesting places. Seed may be planted during spring in wet low lands or marshy places.

**Naias Plants with Seed. . . \$10.00 per bu.**

The Naias is an important Wild Duck Food. It grows in waters ranging in depth from 1 ft. to 5 ft. on a sand, clay or mud bottom in fresh waters. Should be planted during August or September.

**Lespedeza Clover Seed. . \$50.00 per 100 lbs.**

**Hairy Vetch Seed. . . \$35.00 per 100 lbs.**

The Lespedeza Clover is a hardy perennial and important as a food for Upland Game Birds. Hairy Vetch is also important for Quail, Grouse and Pheasants. Seed should be sown during May.

### **TREES, SHRUBS AND VINES**

**Important for Upland Game Birds and Animals**

**No Orders Accepted of Less Than 10  
of Either Specie**

Hackberry (1-1½ inch base).....	\$6.00 each
Hawthorn (3-5 feet high).....	.90 "
Wild Crab (3-4 feet high).....	1.00 "
Mulberry (2-3 feet high).....	.50 "
Red Oak (4-5 feet high).....	3.00 "
Pussy Willow (4-5 feet high).....	.75 "
Red Cedar (2-3 feet high).....	4.00 "
Scotch Pine (2-3 feet high).....	3.00 "
Douglas Fir (1-2 feet high).....	4.00 "
Hazelnut (18-24 inches).....	.75 "
Honeysuckle (3-4 feet).....	.85 "
Chokecherry (3-4 feet).....	.85 "
Smooth Sumac (3-4 feet).....	.50 "
Mountain Currant (18-24 inches).....	.75 "
Wild Rose (18-24 inches).....	.75 "
Swamp Rose (2-3 feet).....	.75 "
American Elder (3-4 feet).....	.75 "
Buffalo Berry (2-3 feet).....	.75 "
Snow Berry (2-3 feet).....	.50 "
Nanny Berry (3-4 feet).....	.90 "
Bittersweet (2 years).....	.65 "
Wild Grape (2 years).....	.60 "
Raspberry Plants.....	1.50 doz.



NOTE—Trees, Shrubs and Vines listed above are important as food producers and cover plants for Upland Game Birds and Animals. Prices are F. O. B. Nurseries. No orders accepted for any quantity amounting to less than \$10.00. Delivery of stock will be made at the proper time for transplanting and is guaranteed to grow in accordance with our liberal guarantee printed in this booklet.

# Fish Food and Cover

## NECESSITY OF AQUATIC VEGETATION FOR FISH

Many of the plants which are important food plants for waterfowl are also important food and cover plants for fish. Therefore, one will improve both hunting and fishing by establishing a growth of aquatic vegetation in their waters.

Plant life takes a very important part in the purification of waters by taking up the poisonous gases and sending forth oxygen into the waters which is essential to fish life. These plants also support countless numbers of minute animal life upon which the young fry feed. They also provide excellent shelter and hiding places for younger fish to hide and escape the larger ones which are of a cannibalistic nature, feeding upon one another.

Aquatic vegetation assists in the clarification of the waters and shades the under waters keeping them cool which is very helpful and healthful to the fish life.

In order that there be a plentiful supply of fish in any waters it is first necessary to protect the small fry. They cannot feed upon the larger insect life or upon one another as the larger fish do and as a result in waters barren of aquatics, millions and millions of the fry perish.



## SUNLIGHT FOUND HARMFUL TO FISH AND FISH EGGS

As a result of experiments at its Holden, Va., hatchery, the Bureau of Fisheries, Department of Commerce, has found that exposure to sunlight is detrimental to eggs, fry and fingerlings.

The experiments, it was stated orally on November 4, were designed to determine whether the remarkable curative results ascribed to ultra-violet rays and sunlight were actual. The bureau found that the doubts of fish culturists on this score were well founded, continuous ex-

posure to direct sunlight being found as not only of no benefit but definitely harmful to eggs and young fish.





# TERMS

Prices listed herein effective January 1st, 1931, this list cancels all previous lists and quotations. These prices are F. O. B. Oshkosh or other shipping points unless otherwise stated and subject to change without notice.

10% discount off prices listed on all orders placed before May first. 2% additional discount if payment accompanies order.

We urge you to order early and be sure of your supply. Cash or satisfactory reference with order, if purchaser has no credit established with us. Shipments will be sent C. O. D. if so desired. Those ordering during January and February for later spring delivery we offer the courtesy of an open account shipment, payment due 10 days after date of shipment.

Accounts not paid when due are subject to sight draft also interest charged at the rate of 8% per annum.

These aquatic seeds and other planting materials are perishable and must reach their destination in the shortest possible time and should be shipped by express. If you wish shipment by Parcel Post or Prepaid Express please send sufficient money to cover same otherwise we will ship charges collect.

Freight shipments can be made on dry seeds, shrubs and trees as listed. Wild Duck Millet, Smartweed, Chufa, Duck Wheat, Milo Maize and all items listed on page 25 under trees, shrubs and vines.

For our reference write New American Bank, Oshkosh, Wis.; Department of Conservation, New Orleans, La.; American Game Protective Assn., Woolworth Bldg., New York City; American Wildfowlers Assn., Washington, D. C.; I. T. Quinn, Commissioner of Conservation, Montgomery, Ala.; Peter S. Twitty, Commissioner of Conservation, Atlanta, Ga.; any outdoor sportsmen's magazine such as Field and Stream, Outdoor Life, Outdoor America, etc.

## GUARANTEE

We guarantee our seeds, roots, tubers and other nursery stock to grow and produce satisfactory results. If a complete planting or any portion fails to produce what you consider a satisfactory growth after allowing a sufficient time to grow and mature, we will agree to furnish an equal quantity to that which fails at one-half the list price.

You are the judge as to whether or not your planting has proven a success. If dissatisfied with the results, tell us about it and we will replace the order at half-price, or an equal value of any other planting materials you wish to select from our list at one-half list price.

Failures with good germinating seed and hardy plants, tubers, shrubs, etc., such as we supply are few and far between. Marsh and water plants are very hardy and sure to grow.

*Complete Planting Instructions Sent with Each Order*

WISCONSIN AQUATIC NURSERIES

(Box 331)

OSHKOSH, WIS., U.S.A.

# ORDER BLANK

## Wisconsin Aquatic Nurseries

P. O. Box 331

Oshkosh, Wisconsin, U. S. A.

Date.....

Ship to.....

Address.....

Express..... Parcel Post.....

Please Ship on.....

DATE

QUANTITY	MATERIAL	PRICE
	Lb. Giant Wild Rice Seed	
	Wild Celery Tubers	
	Sago Pondweed Tubers	
	Wampee Plants or Seeds	
	Wapato Duck Potato Tubers	
	Lb. Wild Duck Millet Seed	
	Lb. Smartweed Seed	
	Bushels Ducksmeat Plants	
	Bu. Coontail Plants	
	Bu. Elodea Plants	
	Bu. Water Milfoil Plants	
	Bu. Widgeon Grass Plants	
	Bu. Eel Grass Plants	
	Spatterdock Plants	
	White Waterlily Roots	
	Lb. American Lotus Seed	
	Lb. Burreed Seed	
	Total	
	Less 10% Discount	
	Amount of Order	\$

Inclose Check \$..... Money Order.....

Order By.....

SIGN NAME HERE

Address.....



# **PROFESSIONAL PLANTING SERVICE**

**WE EXAMINE, PLAN AND PLANT  
YOUR WATERS**

The best method of procedure in developing an attractive feeding ground for either water-fowl, fish, or game is to employ the services of our specialist to come and make a personal examination of the property and supervise the planting thereof. Where Leagues or Associations plan to develop several lakes or properties, Clubs or private individuals controlling large areas wish to make plantings to the extent of \$500 or more we recommend this service for best and quickest results.

Perhaps you now have some natural foods growing in your waters or about the shores unbeknown to you, this service will eliminate the danger of duplicating in planting. It will insure the planting of the proper plants adapted to those particular water or soil conditions. Experimental planting on a large scale is often very costly. One experienced in planting these materials can often make the same quantity cover twice the area, with better results than the inexperienced. Proper planting is very important.

By having this service you will learn what grows there, its value, what we recommend planting, quantity, price and where as well as when to plant. During Spring we are able to make investigations of properties and waters and supervise the planting work in one trip by telegraphing for materials after survey is completed and awaiting their express arrival. We often have several such contracts in a community and work from one preserve to another.

Our charge for this service is \$20 per day plus all hotel bills and traveling expenses incurred in making the trip to the property and return. When we are able to obtain several contracts in one state it enables us to quote a special low price, making this service very inexpensive. Write us for quotation on this service.

## **WISCONSIN AQUATIC NURSERIES**

**Oshkosh, Wisconsin, U.S.A.**

(January, 1931, issue of Field & Stream)

## Planting Ducks

**H**ERE is a strange tale wherein planters expect to reap something entirely different from what they sow.

The extraordinary sight of men armed with mysterious seeds, sowing their crops in quite an unorthodox fashion over the water of lakes, ponds, streams, mud flats and brackish bays, may soon astound the eye. But even so, your curiosity may elicit from one of the planters a reply still more astounding to the ear, "We're planting ducks."

And that, with certain reservations and elaborations, will be the truth.

Most sportsmen are not only familiar with but have practiced methods helpful in conserving the supply of ducks. They have kept inside of bag limits and outside of rest days and refuges. But for the first time they appear to be taking serious interest in planting permanent duck foods.

After examining the culinary preferences of various species, the Ohio Conservation Division recently announced a list of the best foods, and obtained a favorable promise of action from hunters of the state. The practice should spread and gain momentum, for increasing the yield of favorite foods and the number of wintering waters would mean, literally, "planting ducks." The gradual disappearance of properly equipped waterfowl areas is one of the worst threats to wild duck hunting.

Food planting would not only aid in solving this problem, but would distribute the flights more widely. Causing the flights to spread over new areas, as opposed to their congregation in a few popular wintering spots, would no doubt result in a condition more advantageous to both ducks and hunters.

The better foods, as announced by the Ohio experts, are wild celery, sago pondweed, wild duck millet, wapato or duck potato, and wild rice.

Wild sago pondweed is perhaps the best all-round duck food that can be planted. It grows submerged, in slightly alkaline or hard fresh waters and ponds. Its seed clusters are eaten greedily by mallard, teal and widgeon, and its tubers by canvasback and redhead.

Wild rice is a food for all wild ducks. Mallard, teal, canvasback, redhead, widgeon, pintail and coot will fly many miles for it. Planted in about three feet of water, it thrives best in fresh-water streams and lakes and ponds that have a current and which do not change more than two feet in depth during the year.

Wapato, or duck potato, is a fresh-water plant liked by all waterfowl and especially by mallards. It grows best in water from one to two feet deep or in mud flats and marshes, and also provides shelter for food and game fish.

For the slightly brackish waters of bays and nooks wild celery is an excellent food to plant. It grows submerged, and will attract every species of ducks and geese, as well as game fish.

Wild duck millet is a food relished by all puddle ducks, including mallard, teal, pintail, widgeon and coot. It thrives best in lowlands, mud flats and lakes, and ponds that lower in the summer.

Any hunter interested in "planting ducks" will obtain ready assistance from his state game department.